

ABSTRACT

A nonvolatile semiconductor memory is provided with a main memory array and a sub-memory array. When rewriting a portion of data having been written in the main memory cell array, a modification data is written into the sub-memory cell array without erasing said main memory cell array. Further, correspondent information on a first address of the main memory cell array storing a data to be modified and a second address of the sub-memory cell array storing the modification data is recorded. At the time of a readout operation, a readout address is compared with the first address recorded in the correspondent information. When said comparison result indicates consistency, a data in the sub-memory cell array of the second address corresponding to the first address is read out. Otherwise, when the comparison result indicates inconsistency, a data in the main memory cell array corresponding to the readout address is read out.